

Serial No. 10/773,266
Reply to Office Action dated November 6, 2007

Docket No. 3722/0176P

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of storing an array of digital data into a memory, the memory having a plurality of memory pages, at least one memory page which only has a row with a plurality of memory cells having a first memory section and a second memory section, the method comprising the steps of:

dividing the array of digital data into a plurality of block units, each of the block units having a plurality of odd rows and a plurality of even rows, each of the odd rows and the even rows having at least one byte; and

storing subsequent odd rows of at least one of the block units into consecutive storage locations in the first memory section, and storing subsequent even rows of at least one of the block units into consecutive storage locations in the second memory section;

wherein the first memory section has a first number of first areas and the second memory section has a second number of second areas, each of the first areas and the second areas has consecutive storage locations, each of the first number and the second number is larger than one, each of the first and the second areas comprises a plurality of rows of one of the block units, and the first areas and the second areas in the first memory section and the second memory section respectively are in interlaced arrangement.

2. (Original) The method of claim 1, wherein the array of digital data comprises a picture in a video bit stream.

3. (Canceled)

4. (Currently amended) The method of claim 31, wherein the first number is equal to the second number.

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5. (Canceled)

6. (Canceled)

7. (Currently amended) The method of claim 31, wherein both the first number and the second number have a value of two.

8. (Original) The method of claim 1, wherein each of the block units has m rows, wherein m is an integer equal to or larger than four.

9. (Original) The method of claim 8, wherein m is equal to thirty-two.

10. (Currently Amended) A method of storing an array of digital video data representing a picture in a video bit stream into a memory, the memory having a plurality of memory pages, at least one memory page which only has a row with a plurality of memory cells having a first memory section and a second memory section, the method comprising the steps of:

dividing the array of digital video data into a plurality of block units, each of the block units having a plurality of odd rows and a plurality of even rows, each of the odd rows and the even rows having at least one byte; and

storing subsequent odd rows of at least one of the block units into consecutive storage locations in the first memory section, and storing subsequent even rows of at least one of the block units into consecutive storage locations in the second memory section;

wherein the first memory section has a first number of first areas and the second memory section has a second number of second areas, each of the first areas and the second areas has consecutive storage locations, each of the first number and the second number is larger than one, each of the first and the second areas comprises a plurality of rows of one of the block units, and the first areas and the second areas in the first memory section and the second memory section respectively are in interlaced arrangement.

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11. (Canceled)

12. (Original) The method of claim 10, wherein each of the block units has m rows, wherein m is an integer equal to or larger than four.

13. (Currently Amended) A method for storing an array of digital data representing a picture into a memory and retrieving a prediction block of the picture from the memory, the memory having a plurality of memory pages, at least one memory page which only has a row with a plurality of memory cells having a first memory section and a second memory section, the method comprising the steps of:

dividing the array of digital video data into a plurality of block units, each of the block units having a plurality of odd rows and a plurality of even rows, each of the odd rows and the even rows having at least one byte;

storing subsequent odd rows of at least one of the block units into consecutive storage locations in the first memory section, and storing subsequent even rows of at least one of the block units into consecutive storage locations in the second memory section; and

retrieving the digital data representing the prediction block stored in the first memory section, and retrieving the digital data representing the prediction block stored in the second memory section;

wherein the first memory section has a first number of first areas and the second memory section has a second number of second areas, each of the first areas and the second areas has consecutive storage locations, each of the first number and the second number is larger than one, each of the first and the second areas comprises a plurality of rows of one of the block units, and the first areas and the second areas in the first memory section and the second memory section respectively are in interlaced arrangement.

14. (Canceled)

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15. (Original) The method of claim 13, wherein each of the block units has m rows, wherein m is an integer equal to or larger than four.